

Emulsion polymerization of olefins

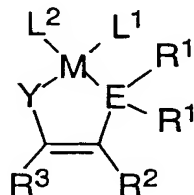
Abstract

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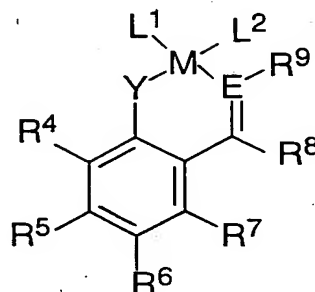
A process for emulsion polymerizing one or more olefins involves reacting it/them with at least one complex compound of the formula Ia or b

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Ia



Ib

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where M is a transition metal from groups 7 to 10 of the Periodic Table of the Elements and is preferably Ni in aqueous dispersion and at least one radical R¹ to R³ and optionally one radical R⁴ to R⁹ contains a hydrophilic group X, selection being made from
 25 -SO₃⁻, -O-PO₃²⁻, NH(R¹⁵)₂⁺, N(R¹⁵)₃⁺ or -(OCH₂CH₂)_nOH, where n is an integer between 1 and 15. For the process of the invention it is optional to use an activator such as, for example, olefin complexes of rhodium or of nickel. This invention further relates to dispersions of polyolefins such as polyethylene and ethylene
 30 copolymers in water, for example, and to the use of the aqueous dispersions of the invention for paper applications such as paper coating or surface sizing, paints, adhesive base materials, molded foams such as mattresses, textile and leather applications, carpet back coatings, or pharmaceutical
 35 applications.

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